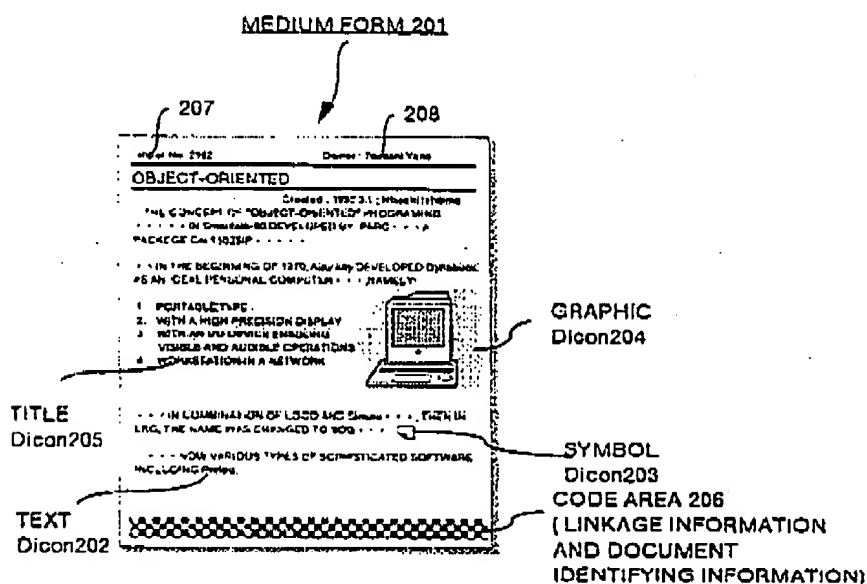


REMARKS

Claims 1-26 are pending, but stand rejected. That rejection has been made final. In view of the following remarks, the Applicant respectfully asks that the Examiner reconsider and withdraw the rejections.

Claim Rejections – 35 USC §102: Claims 1-10, 17, 18, 22, and 23-26 have been rejected as being anticipated by USPN 6,537,324 issued to Tabata

Tabata discloses a system for utilizing printed physical documents as if they were web pages displayed on a computer screen. Tabata labels this concept PUI or Paper User interaction. See, e.g., Tabata, col. 7, line 56 through col. 8, line 14. Such a printed document is referred to as medium form (201) where medium form information is the printed information on the medium form (201). See Tabata, col. 8, lines 31-58 (describing medium form information), and Tabata, col. 5, lines 47-57 (describing medium form information), and Fig. 2, reproduced below.

FIG.2

A printed medium form (201) is produced from a hypertext document. Tabata, col. 6, lines 26-37. The medium form (201) includes dicons (204) – (205) and a code area (206). Tabata, col. 8, lines 31-58. Dicons (204) – (205), also referred to as “described information” are text or images printed on medium form (201) that serve as the functional equivalent of a hyperlink included in a web page. See, e.g., Tabata, col. 8, line 59 through col. 9, line 57. A dicon can take the form of text, an icon, or a graphic. Tabata, col. 9, lines 18-31. The linkage information encoded in code area (206) links or otherwise associates each dicon with a “correlated information file.” See Tabata, col. 10, line 8-53 and Fig. 7.

A user, with printed medium form (201) in hand, checks or otherwise marks a selected dicon with a pen or other writing instrument. See, Tabata, Fig. 5. The medium form (201) is then scanned to create a raster image that is compared to a raster image of the original hypertext from which the medium form (201) was produced. See Tabata, col. 6, line 65 through col. 7, line 4; step 1202 of Fig. 12. The difference between the raster images reveals the mark. See Tabata, col. 6, line 65 through col. 7, line 4; step 1202 of Fig. 12. The portion of the raster image containing the code section (206) can then be decoded to obtain linkage information for a dicon corresponding to the revealed mark. See Tabata, col. 6, line 65 through col. 7, line 4; step 1202 of Fig. 12. Using that linkage information, a correlated information file linked to that dicon can be retrieved and printed. See Tabata, steps 1207-1211 of Fig. 12. Where that correlated information file is a hypertext document, a file server (440) converts that hypertext document to medium form information to be sent to a printer to print another medium form (201). See Tabata, col. 15, lines 33-44; step 1210 of Fig. 12; col. 29, lines 1-6; and step 2105 of Fig. 21.

Claim 1 is directed to a printing method and recites the following acts:

1. receiving print stream data adapted to contain a network address, at a printer;
2. determining, at the printer, whether a URL or external network option is

enabled;

3. detecting at the printer if a network address is in the received data;
4. sending on the Internet or other network, an access request from the printer to an administrative control entity separate and distinct from a user entity instigating the print stream data, for a document to the network address;
5. retrieving the document from the network address at the printer in the instance the administrative control entity grants the access request;
6. merging, at the printer, the document from the network address into the print stream data to form a modified document; and
7. printing the modified document.

Tabata fails to teach or suggest merging, at a printer, a document into print stream data (received at the printer) to form a modified document where the document being merged into the print stream data was obtained at the printer from a network address detected in the print data stream data in the manner recited by Claim 1.

The Examiner mistakenly asserts that Tabata teaches merging, at the printer, the document from the network address into the print stream data to form a modified document, citing Tabata col. 24, lines 18-38; col. 30, line 46 through col. 31, line 19 and col. 24, lines 24-49. The cited passages from Tabata are reproduced as follows:

The file server (correlated information file retrieving unit) 440 retrieves, when having received an address (URL) of the correlated information file, an appropriate correlated information file from the appropriate file device 410 according to the address (URL) of the correlated information file (S2103).

The file server transfers the retrieved correlated information file to a printer 460 or to a printer 470B (S2104). However, when the correlated information file itself is found also a hypertext, as it is required to output the correlated information file as medium form information, the file server 440 prepares medium form information from the hypertext and transfers the medium form information to the printer 460 or 470B (S2105).

Specification of the printer 460 or 470B as an address for transferring at that time can easily be realized by describing it on the medium form 420 or by selecting it on the medium form 420 although detailed description is omitted herein.

The printer 460 or 470B outputs the received correlated information file (including the medium form information) on recording paper as a correlated information file 450 (S2106).

Tabata, col. 24, lines 18-38.

The document information management system according to the present invention comprises a file unit with information relating to particular words, sentences, symbols, or graphics previously stored therein as a correlated information file; a medium form with at least one described information comprising any of words, sentences, symbols, and graphics, linkage information for linking the described information to the correlated information file in the file unit, and selection information for selecting particular described information among the described information recorded thereon; a correlated information identifying unit for reading image data from the medium form, identifying the selected correlated information file according to the selection information as well as linkage information in the read image data, and outputting an address of an appropriate correlated information file; a correlated information file retrieving unit for receiving an address of the correlated information file from the correlated information identifying unit and retrieving an appropriate correlated information file from the file unit according to the address of the correlated information file; an image data reader for reading image data from the medium form; a correlated information file identifying/retrieving unit for receiving image data from the image data reader, identifying an address of the selected correlated information file according to the selection information and linkage information in the image data, and retrieving the appropriate correlated information file from the file unit; and an output unit for outputting the correlated information file retrieved by the correlated information file retrieving unit or the correlated information file identifying/retrieving unit, so that continuity and correlation of information between a digital world such as a computer system and a paper document can be constructed, a paper document can be incorporated in the document information management system in the digital world, direct access to the digital world can be achieved by using the paper document as a medium, and further a hypertext using the paper document (paper hypertext) can be realized.

Tabata, col. 30, line 46 through col. 31, line 19.

The file server transfers the retrieved correlated information file to a printer 460 or to a printer 470B (S2104). However, when the correlated information file itself is found also a hypertext, as it is required to output the correlated information file as medium form information, the file server 440 prepares medium form information from the hypertext and transfers the medium form information to the printer 460 or 470B (S2105). Specification of the printer 460 or 470B as an address for transferring at that time can easily be realized by describing it on the medium form 420 or by selecting it on the medium form 420 although detailed description is omitted herein.

The printer 460 or 470B outputs the received correlated information file (including the medium form information) on recording paper as a correlated information file 450 (S2106).

As described above, with the document information management system according to Embodiment 4, continuity and correlation of information from a hypertext as a document in the digital world such as a computer system to a medium form 420 as a paper document are constructed through the linkage information on the medium form 420, so that a paper document can be incorporated in the document information management system in the digital world, direct access to the digital world can be achieved by using the paper document as a medium, and further a hypertext using the paper document (paper hypertext) can be realized.

Tabata, col. 24, lines 24-49 (emphasis added).

Contrary to the Examiner's position, Tabata discloses assembling medium form information which is then used to print a medium form. Medium form information is assembled from a hypertext document. That hypertext document may have been retrieved following a scan of a medium form having a marked dicon linked via an URL or other address to that hypertext document. That address is not detected at a printer and is not detected within print stream data in the manner required by Claim 1.

Medium form information includes, information regarding the visual appearance of the hypertext document (image extraction information), dicons (described information), and linkage information. See, e.g., Tabata, col. 5, lines 28-36 (discussing preparing medium form information from a hypertext document). Medium form

information is prepared at a printer server 30 or file server 440 which in turn transfers the medium form information to a printer. Tabata, col. 5, lines 28-36 (printer server 30) and col. 29, lines 1-6 (file server 440). Tabata mentions:

Although a printer server is used herein as a medium form information preparing unit, it is not particularly restricted thereto, and it is needless to say that any device such as a personal computer/work station enabling execution of the medium form information preparing software may be employed. Also, a function as a medium form information preparing unit may be given to the file server 20 in place of discretely providing the printer server 30 as a medium form information preparing unit.

Tabata, col. 6, lines 38-46. Tabata makes no mention or suggestion medium form information could be assembled at a printer.

Even if Tabata's medium form information is considered to be print stream data, it only becomes so after being sent to a printer – that is – only after it is sent from a printer server (30) or a file server (440) to the printer. After Tabata's medium form information is sent to a printer, an address is not detected within that media form information and the medium form information is not merged with anything, let alone a document retrieved from a detected address.

For at least these reasons Claim 1 is patentable over Tabata and Russell, individually and combined as are Claims 2-21 which depend from Claim 1.

Claim 22 is directed to a program product comprising a computer readable medium having machine readable program code for implementing the method of Claim 1. For at least the same reasons Claim 1 is patentable, so are Claim 22 and Claims 23 which depends from Claim 22.

Claim 24 is directed to a program product, including machine readable program code for causing a machine to carry out the following method steps:

1. receiving print stream data at a printer;
2. determining, at the printer, whether a URL or external network option is enabled;

3. detecting, at the printer, if a network address is included in the received data;
4. sending on the Internet or other network an access request from the printer to an administrative control entity separate and distinct from a user entity instigating the print stream data, for a document to the network address;
5. retrieving, at the printer, the document from the network address in the instance the administrative control entity grants the access request;
6. merging, at the printer, the document from the network address into the print stream data to form a modified document; and
7. printing the modified document; and
8. further comprising program code for performing, at the printer, the step of enabling/disabling the URL or external network access option.

Like Claim 1, Claim 24 recites limitations in which, at a printer, a document is merged into print stream data (received at the printer) to form a modified document where the document being merged into the print stream data was obtained at the printer from a network address detected in the print data stream data. As made clear above, Tabata doe not teach or suggest such limitations.

For at least the same reasons Claim 1 is patentable, so is Claim 24.

Claim 25 is directed to a printing method and recites the following acts:

1. determining if a network address is contained in print stream data received at a printer;
2. determining, at the printer, whether a URL or external network option is enabled;
3. sending on the Internet or other network an access request from the printer to control entity separate and distinct from an entity instigating the print stream data, for a document to the network address;

4. retrieving, at the printer, the document from the network address in the instance the administrative entity grants the access request;
5. merging, at the printer, the document from the network address into the print stream data to form a modified document; and
6. using the printer to printing the modified document.

Like Claim 1, Claim 24 recites limitations in which, at a printer, a document is merged into print stream data (received at the printer) to form a modified document where the document being merged into the print stream data was obtained at the printer from a network address detected in the print data stream data. As made clear above, Tabata doe not teach or suggest such limitations.

For at least the same reasons Claim 1 is patentable, so is Claim 25.

Claim 26 is directed to a program product including machine readable program code for causing a machine to carry out the following method steps:

1. determining, at the printer, if a network address is included in print stream data received at a printer;
2. determining, at the printer, whether a URL or external network option is enabled;
3. sending on the Internet or other network an access request from the printer to an administrative control entity separate and distinct from a user entity instigating the print stream data, for a document to the network address;
4. retrieving, at the printer, the document from the network address in the instance the administrative entity grants the access request;
5. merging, at the printer, the document from the network address into the print stream data to form a modified document; and
6. using the printer to printing the modified document.

Like Claim 1, Claim 26 recites limitations in which, at a printer, a document is merged into print stream data (received at the printer) to form a modified document where the document being merged into the print stream data was obtained at the printer from a network address detected in the print data stream data. As made clear above, Tabata does not teach or suggest such limitations.

For at least the same reasons Claim 1 is patentable, so is Claim 26.

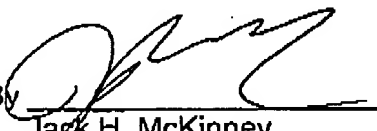
Claim Rejections – 35 USC §103: Claims 11-14 have been rejected as being unpatentable over Tabata in view of USPN 6,537,324 issued to Tabata in view of USPN 6,375,078 issued to Russell. Claims 11-14 each ultimately depends from Claim 1 and includes all the limitations of that base claim. For at least the same reasons Claim 1 is patentable, so are Claims 11-14.

Claim Rejections – 35 USC §103: Claims 15, 16, and 19-21 have been rejected as being unpatentable over Tabata in view of USPN 6,537,324 issued to Tabata in view of USPN 5,848,413 issued to Wolff. Claims 15, 16, and 19-21 each ultimately depends from Claim 1 and includes all the limitations of that base claim. For at least the same reasons Claim 1 is patentable, so are Claims 15, 16, and 19-21.

Conclusion: In view of the foregoing remarks, the Applicant respectfully submits that the pending claims are in condition for allowance. Consequently, early and favorable action allowing these claims and passing the application to issue is earnestly solicited. The foregoing is believed to be a complete response to the outstanding Office Action.

Respectfully submitted,

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